# Minutes from the December 19, 2003 MSFC PMC Prepared by VS10/Rich Gladwin

DD01/Rex Gevedin chaired the meeting. Mr. Geveden requested that the Gravity Probe B (GP-B) proposed re-baseline plan be presented first. SD/Tony Lyons presented for the GP-B program. The rebaseline was necessary since GP-B had exceeded its planned budget and the program end date was expected to slip. The launch date has slipped from November 20, 2003 to April 20, 2004. VS/Gerry Flanagan questioned why only a single axis vibration test was performed as indicated on the ECU rework flow. Mr. Lyons replied that it was standard practice for the program to only test one axis to limit potential hardware damage. MP/Mike Rudolphi questioned why the ECU rework plan included burn-in after the functional test. Mr. Lyons replied that the post test burn-in was performed at the box level to achieve the required hours of error-free operation. QS/Jan Davis asked if the program had documented the risk to the operations team due to the launch delay. Mr. Lyons replied that actions were being taken to keep the operations team focused and that the risk was included in the "Impact on Personnel" risk. Mr. Lyons indicated that the additional workforce requirements were coordinated with all affected directorates. The MSFC PMC approved the proposed re-baseline plan. The GP-B program will present to the Code S Enterprise PMC for final approval of the proposed rebaseline.

Next, Mr. Gladwin reviewed the agenda. The agenda included: (1) Status of Open Action Items, (2) MSFC Program/Project Health Status, (3) Institutional Budget Redesign, (4) X-37 Status, (5) SSME Channel Wall Nozzle (CWN) Formulation request, (6) James Webb Space Telescope implementation request, (7) GP-B Request for a Change in Approved Project Baseline (already presented) and (8) ISTAR/RBCC project and Transport of Solute and Impurities Project Termination Reviews.

Mr. Gladwin reviewed the open action items. Mr. Geveden asked that the three actions associated with project plan updates be reworded to require Center Director signature prior to being closed. VS/Steve Newton presented the action associated with Project Manager/Lead System Engineer/Business Manager training and certification. The portion associated with project managers was closed. New due dates for Lead System Engineer/Business Managers will be documented and tracked to closure. Mr. Geveden assigned a new action for MSFC projects within NGLT and OSP to submit compliant project plans for Center Director signature.

### **ACTION 1:**

Assigned to:

REP/Danny Davis

IPD/Gary Genge

APP/Phil Best

PT&T/Rick Ryan

X-43C B&LS/Bart Graham

DART/Jim Snoddy

X-37/Dan Dumbacher

LM OSP/Bob Armstrong

Boeing OSP/Robert Champion

**Action**: Obtain Directorate-level concurrence and Center Director signature for project plans. Plans must comply with Agency requirements (NPG 7120.5) and MSFC

requirements (MPG 7120.1).

**Due Date**: TBD

Mr. Gladwin reviewed the health status trends of MSFC programs and projects. Mr. Gladwin presented options to make health status data more current. An action was given to Science Directorate to provide health status reports for all SD projects by the 12<sup>th</sup> of each month.

## **ACTION 2:**

Assigned to: SD01/Ann Whitaker

**Action**: Provide health status reports by the 12<sup>th</sup> of each month for the previous month's performance (e.g. health status reports are due by January 12<sup>th</sup> for December performance).

Due Date: January 10, 2004

A total of four projects reported 'Red' during October 2003. MSRR-1 (Schedule), ET Friction Stir Welding (Schedule), ECLSS (Schedule), and In-Space Propulsion (Cost).

TD/Les Johnson presented an explanation for the In-Space Propulsion cost issue. The actual full cost of POP approved content exceeds the guideline full cost augmented budget. The current budget requirements can not be met with Project reserve. ISP full costs exceed the budget by \$10.742M. FY04 content is being de-scoped based on established Program priorities in order to fit within existing budget. The ISP project will present its proposed re-baseline to the MSFC PMC during the January PMC.

FD/Bob Bagdigian presented an explanation for the ECLSS schedule issue. The projected system deliveries exceed the ISS Program commit date of April 7, 2005. The ECLSS project will present its proposed re-baseline to the MSFC PMC during the January PMC.

AD/Judy Simonds presented the Institutional Budget Redesign Process which specifies how the Center will incorporate full cost directives. The process is focused on five distinct areas: Service Pools, Project Direct, Workforce, Center G&A, and Corporate G&A. Ms. Simonds recommended that the re-designed process be implemented piecemeal. Pre-Planning meetings between Projects and Service-based Service Pools should be conducted. Strategic Planning Agreements will be prepared at the department level. This pre-work

will reduce workload burden in the upcoming POP. The PMC agreed to implement the budget redesign process as presented to the PMC.

UP/Jeff Sexton presented the X-37 project status. X-37 has experienced an Approach and Landing Test Vehicle (ALTV) Estimate At Complete (EAC) cost growth. The project has put the Orbital Vehicle (OV) design work on hold. The project will focus on efforts to complete ALTV with first flight in November 2004 and to qualify high risk OV technologies. ED/Bill Kilpatrick voiced his concern that the project decision to downselect to a single material for hot structure was a risky decision. XP/Dan Dumbacher indicated that a second vendor was on-hold for a time while test results were being analyzed. It was noted that the schedule on page 2 should have indicated a November 2004 first flight, not 2003 as presented. This chart will be updated for the record. Mr. Geveden asked if the expected value of known risks was included in the project's schedule. Mr. Dumbacher indicated the project finally had a good schedule. However he noted there was no float in either the ALTV or the OV schedules. Mr. Geveden asked if the X-37 still had spin-off benefit to the OSP program. Mr. Dennis Smith replied that the X-37 was still providing benefit to the OSP program. Mr. Smith indicated the benefit was not from the thermal protection systems, but from the operations and project management aspects. Mr. Dumbacher indicated that the project was documenting how X-37 might be able to support other future programs and projects. X-37 could be used by Science Directorate to return flight investigation to earth. The X-37 project will return to the PMC for project re-baseline and project plan approval at the February MSFC PMC.

MP/Carol Jacobs presented the SSME Channel Wall Nozzle (CWN) formulation request. The objective of CWN is to break through one of the technological barriers that exist in order to provide safe, reliable access to space. CWN will replace today's jacketed, multiple tube assembly with a simplified low part count design and significantly increase nozzle reliability and maintainability. Ms. Jacobs indicated that the SLEP has recommended that CWN proceed through formulation. TD/Doug Blackwell asked if there would be plume changes due to the different contour of the nozzle. Ms. Jacobs indicted that would be evaluated during the PDR. Mr. Flanagan asked why multiple contractors were being used through PDR. Ms. Jacobs replied that the two competing contractors had each proposed different techniques to attach the liner to the jacket. An action was assigned to determine the workforce needed to support a SEB. The MSFC PMC approved the SSME CWN request to complete the formulation phase.

### **ACTION 3:**

**Assigned to:** MP21/Carol Jacobs

**Action**: Determine the civil service workforce required to conduct an SEB for the SSME Channel Wall Nozzle project. Present any additional workforce requirements to the MSFC PMC. Verify sufficient program budget is available to support the SEB.

Due Date: January 17, 2004

SD/Kevin Russell presented the James Webb Space Telescope activity. The MSFC activity will provide personnel, services, equipment, and facilities necessary to modify and operate the X-Ray Calibration Facility (XRCF) for the purpose of optically testing multiple James Webb Space Telescope (JWST) Primary Mirror Segment Assemblies (PMSAs) at cryogenic temperatures. The MSFC PMC approved the request to submit the proposed increase in technical scope to GSFC. If selected by GSFC, the activity is authorized to proceed into implementation.

TD/Craig McArthur presented the ISTAR/RBCC Termination Review. The project objective was to ground test a RBCC engine for application to flight test. The reason for termination was a funding shortfall in the parent program, NGLT. Mr. McArthur stated that the technological impact to the NGLT program would be the elimination of the parallel path first envisioned by the program (i.e. RBCC and TBCC). Mr. Flanagan asked whether the lack an approved NGLT Program Plan with project-allocated requirements was a factor in the NGLT decision to terminate ISTAR. Mr. McArthur stated that the legacy ASTP program plan was adequate for allocating project requirements. The MSFC PMC concurred that the ISTAR/RBCC project was conducting the termination process in a suitable manner.

SD/Kimberly Robinson presented the Transport of Solute and Impurities Termination Review. The project was to investigate the changes in intrinsic kinetic fluctuations for high purity systems as an MSG payload on ISS. The reason for termination was the decision for Code UG to transition from fundamental research to strategic research. Mr. Jim Ellis advised the project to document Dr. Vekilov's final report with the NSSDC. Annette Tingle was given as a point of contact. The MSFC PMC concurred that the project was conducting the termination process in a suitable manner.

The meeting was then concluded.

# Attendance for MSFC PMC – December 19, 2003

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Council Members	<u>Organization</u>
Rex Geveden	DD01
Axel Roth	DE01
Sheila Cloud	DD01
James Bilbro	DA01
Gerry Flanagan	VS10
Sue Foster	RS01
Bill Kilpatrick	ED01
Tony Lavoie	FD01
Tom Stinson (for Ann Whitaker)	SD01
Doug Blackwell (for Chris Singer)	TD01
Mike Rudolphi	MP01
Jan Davis	QS01
Steve Beale	PS01
Susan Cloud (for Tereasa Washington)	CD01
Jim Ellis	AD30

Others in Attendance	Organization
Rich Gladwin (PMC Secretary)	VS10
Alberto Duarte	TD02
Bob Goss	FD01
Paul McConnoughy	VS10
Bill Simpson	RS40
Scotty Stewart	XP01
David Iosco	PS30
Dan Dumbacher	XP01
Roger Chassey	SD31
Todd May	SD31
Stayce Cole	TD05
Les Johnson	TD05
Ricky Power	TD11
Marie Malone	SD31
Steve Wofford	MP21
Carol Jacobs	MP21
Others in Attendance (continued)	<b>Organization</b>
Dana Solomon	FD11
Teresa Vanhooser	FD30
Buddy Randolph	SD32
Bill Hicks	SD02
Bob Bagdigian	FD11
Matt Homan	SAIC
Donald Bishop	SD02
Gene Goldman	MP21
Melvin Scruggs	AD61
Mark Adrian	AD61

Kenneth Smith	AD6
Charlie Dischinger	ED42
Keith Shackelford	ED14
J. R. Blocker	RS60
Marv Nowlin	<b>QS30</b>
Bob McKemie	VS10
Stephen Burke	RS50
S. Gregg McDaniel	FD10
Steve Newton	VS10
Jerry Miller	CD20
Roslin Hicks	ED02
Thomas Brown	TD07
J. Craig McArthur	TD07
Bill Simpson	RS40
Dinah Williams	VS10
Tim Garner	MP21
Mel Bryant	MP21
Tim Owen	TD04
Brian Matisak	DA01
Kevin Russell	SD21